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- CUPS

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- Astra Linux Special Edition .10015-01 .10015-10 (1.7)
- Astra Linux Special Edition .10015-37 (7.7)
- Astra Linux Special Edition .10152-02 (4.7)
- Astra Linux Special Edition .10015-01 (1.6) (20200722SE16 - 6)
- Astra Linux Special Edition .10015-16 . 1
- Astra Linux Special Edition .10015-16 . 2
- Astra Linux Special Edition .10265-01 (8.1)
- Astra Linux Common Edition 2.12

" LibreOffice" Astra Linux Special Edition .10015-01 (1.6) 20210611SE16 (7) .

" (Astra Linux Special Edition 1.6.9 Astra Linux Common Edition 2.12.43)" Astra Linux Special Edition . 10015-01 (1.6) 20211008SE16 (9) , Astra Linux Common Edition 2.12.43.

" Kerberos" Astra Linux Special Edition .10015-01 (1.7) 2021-1126SE17 (1.7.1) (cups 2.3.3op2-4astra.se9).

CUPS Astra Linux .

```
systemctl status cups
```

, :

```
sudo apt install cups
```

, parsec-cups:

```
sudo apt install cups parsec-cups
```

, , :

1. fly-admin-printer.
2. web- web- :

 localhost:631/admin

3. web- , . cupsctl - sudo , (.). cupsctl .

, (), lpadmin (, " ") , SystemGroup /etc/cups/cups-files.conf.

 Astra Linux Special Edition x.7 .

, /etc/cups/cupsd.conf. Kerberos, . man cupsd.conf.

, . /etc/sudoers.d/lpadmins :

```
%lpadmin ALL=(ALL:ALL) NOPASSWD: /usr/bin/systemctl restart cups
%lpadmin ALL=(ALL:ALL) NOPASSWD: /usr/bin/systemctl stop cups
%lpadmin ALL=(ALL:ALL) NOPASSWD: /usr/bin/systemctl start cups
%lpadmin ALL=(ALL:ALL) NOPASSWD: /usr/bin/systemctl status cups
```

, lpadmin, sudo ,, cups . . man sudoers.



Astra Linux .

()

, Astra Linux Special Edition, lpmac () lpmac_ald (). MacAdmin /etc/cups/cupsd.conf ().

, , , localhost. .
:

1. web- web-.
2. :

```
sudo cupsctl --remote-admin
```

--remote-admin - .

, .
:

1. web- web-.
2. :

```
sudo cupsctl --share-printers --remote-any ServerAlias=`hostname`
```

:

- --share-printers - ;
- --remote-any - (, ,);
- ServerAlias - "" . cups HTTP-, (IP- DNS). "*" () . , (cupsctl). , , , localhost.

3. **DefaultAuthType Basic;**
4. :

```
sudo cupsd -t
```

5. CUPS:

```
sudo systemctl restart cups
```

6. CUPS:

```
sudo systemctl status cups
```

web- CUPS

:

1. web- :

```
localhost:631/admin
```

2. "".
3. , **lpadmin**.
4. , . (, USB- USB Printer #1). , " ".
5. .

 USB- .

6. , Print Test Page () Maintenance ().
7. , , .

:

```
lp -d *_* *_*
```

:

```
lpadmin -p printername -E -v socket://11.22.33.44 -m drv:///sample.drv  
/laserjet.ppd
```

LibreOffice



" LibreOffice" Astra Linux Special Edition .10015-01 (1.6) [20210611SE16 \(7\)](#)

LibreOffice (- -) . , , Fly, /etc/cups/client.conf :

DiscoveredOnly Yes

cups:

```
sudo systemctl restart cups
```

/etc/cups/printers.conf /etc/cups/ppd/* scp:

```
scp /etc/cups/printers.conf 10.10.10.10:/etc/cups/  
scp /etc/cups/ppd/* 10.10.10.10:/etc/cups/ppd/
```

1. .

2. (, Astra Linux Special Edition parsec). **fly-admin-printer** (.) web- CUPS.
3. `/etc/cups/client.conf`, `ServerName`, , :

```
ServerName <__>
```

Kerberos

Kerberos ,. `/etc/cups/client.conf`, `ServerName`, :

```
ServerName <__>
```

Kerberos FreeIPA

FreeIPA

- `dc.domain.ipa` – FreeIPA;
- `printserver.domain.ipa` (`cups` FreeIPA, `printserver` `dc`);
- `client.domain.ipa` – FreeIPA.

FreeIPA

FreeIPA (CLI) FreeIPA. CLI FreeIPA.

1. Kerberos (CLI FreeIPA. `admin`):

```
kinit admin
```

2. :

- a. , , `print_admins`:

```
ipa group-add print_admins
```

```
-----  
"print_admins"  
-----
```

```
    : print_admins  
    ID : 848400014
```

- b. - :

```
ipa group-add lpmac_ald
```

3. , , `print-admins` :

- a. `print_admin`:

```
ipa user-add print_admin --first <> --last <>
```

- b. `print_admin` `print_admins`:

```
ipa group-add-member --users=print_admin print_admins
```

- c. (- `print_admin`) `lpmac_ald` :

```
ipa group-add-member --users=print_admin lpmac_ald
```

4. `ipp` (`cups fly-admin-cups`):

```
ipa service-add ipp/printserver.domain.ipa
```

5. `web-cups` , `HTTP`:

```
ipa service-add HTTP/printserver.domain.ipa
```

1. - (Astra Linux Special Edition -) ;

2. Kerberos :

```
sudo kinit admin
```

3. `/etc/krb5.keytab`:

- a. `ipp`:

```
sudo ipa-getkeytab -p ipp/printserver.domain.ipa@DOMAIN.IPA -k /etc/krb5.keytab
```

- b. `web-cups`:

- i. , :

```
sudo ipa-getkeytab -p HTTP/printserver.domain.ipa@DOMAIN.IPA -k /etc/krb5.keytab
```

- ii. , `HTTP (-r)`:

```
sudo ipa service-allow-retrieve-keytab HTTP/dc.domain.ipa --groups=admins
sudo ipa-getkeytab -p HTTP/dc.domain.ipa@DOMAIN.IPA -k /etc/krb5.keytab -r
sudo ipa service-disallow-retrieve-keytab HTTP/dc.domain.ipa --groups=admins
```

• [Kerberos web-](#)

4. , :

```
sudo klist -kte /etc/krb5.keytab
```

Kerberos Windows AD

• :

- [CUPS](#) [Kerberos AD](#)
- [CUPS](#) [Kerberos](#) [KEYRING:persistent](#) [AD](#)

Kerberos ALD

Kerberos ALD FreeIPA, .

1. **ALD** :

```
sudo ald-admin group-add print_admins
```

2. **ALD lpmac_ald:**

```
sudo ald-admin group-add lpmac_ald
```

3. `/etc/cups/cups-files.conf` **SystemGroup** () **print_admins**;

4. **ALD** **ALD**, :

```
sudo ald-admin user-add print_admin  
sudo ald-admin group-mod print_admins --add-users --user=print_admin  
sudo ald-admin group-mod lpmac_ald --add-users --user=print_admin
```

5. **ALD** **ALD** **ALD**, . :

```
sudo ald-admin service-add ipp/server.my_domain
```

6. **mac**, :

```
sudo ald-admin sgroup-svc-add ipp/server.my_domain --sgroup=mac
```

7. **Kerberos** **ALD ald-client**, :

```
sudo ald-client update-svc-keytab ipp/server.my_domain
```

8. **sudo** :

```
sudo cupsctl DefaultPolicy=default ServerName=server.my_domain  
MacEnable=On DefaultAuthType=Negotiate
```

9. **CUPS**, :

```
sudo systemctl restart cups
```

CUPS

CUPS FreeIPA ALD.

1. `/etc/cups/cups-files.conf` :

```
SystemGroup lpadmin
```

:

```
SystemGroup lpadmin print_admins
```



, . , lpadmin, admins , admins .

2. , " " ():

```
sudo cupsctl DefaultPolicy=authenticated ServerName=printserver.domain.  
ipa MacEnable=On DefaultAuthType=Negotiate
```

/etc/cups/cupsd.conf, () ("=" , ,):

```
DefaultAuthType Negotiate  
DefaultPolicy authenticated  
ServerName printserver.domain.ipa
```

3. :

```
sudo cupsd -t
```

4. CUPS :

```
sudo systemctl restart cups
```

Kerberos

, cupsd:

1. Kerberos, sudo:

```
sudo kdestroy -A
```

2. (, ,),:

```
sudo cupsctl DefaultPolicy=default
```

:

```
cupsctl:
```

():

```
cupsctl:
```

3. Kerberos print_admin, :

```
sudo kinit print_admin
```

4. , Kerberos ;

5. :

```
kdestroy -A  
/usr/sbin/cupsctl DefaultPolicy=default  
#  
kinit print_admin  
/usr/sbin/cupsctl DefaultPolicy=default  
#
```

Astra Linux Special Edition 1.6 [20190222SE16 \(1.6.2\)](#) :

•
•

fly-admin-printer.

 /var/spool/cups/parsec (root), , lp.

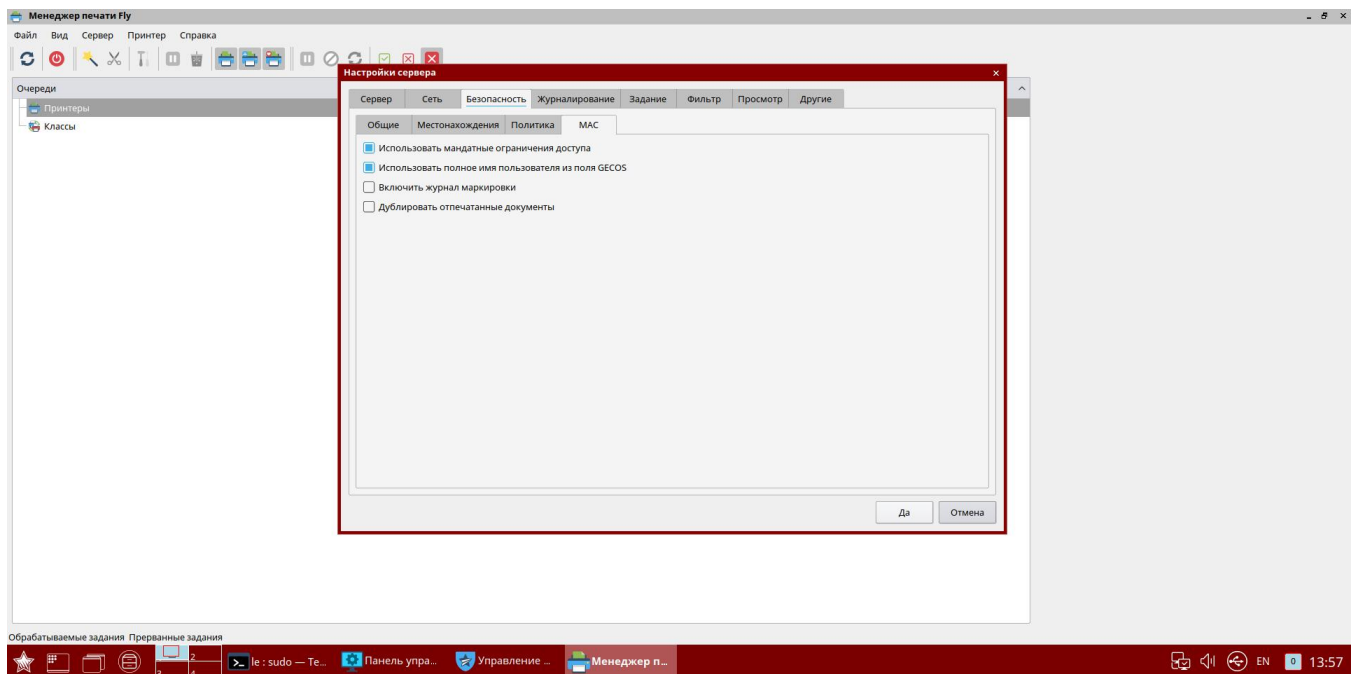
:

```
sudo fly-admin-printer
```

 "" "" "" ""

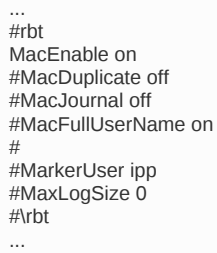
 "" "" ""

"" "" / "".



/etc/cups/cupsd.conf.

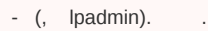
/usr/share/cups/cupsd.conf.default:



- Astra Linux Special Edition .10015-01 (1.6) [20211008SE16 \(9\)](#);
- Astra Linux Common Edition 2.12.43.

- `... " " ...`
- `... /etc/cups/cupsd.conf :`

CUPS. .



, Astra Linux Special Edition, , , , , .

, , Astra Linux Special Edition .10015-01 (1.6) :

- fly-admin-printer ("">" ">">"");
- fly-jobviewer, fly-admin-printer, .
., "" "" "" ;
- markjob.



A 6x6 grid of dots. The dots are located at the following (row, column) positions (assuming top-left is (0,0) and bottom-right is (5,5)):

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•					
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				••••	

• • •

• ;



/etc/cups/marker.template.